KATLYAR, O.K., Cand Tech Sci -- (diss) "Calculation of the effect of the heat engineering qualities of enclosed constructions upon the heat regime of living quarters in the summer time in Uzbekistan." Tashkent, 1958, 15 pp (Min of Higher Education USSR. Central Asian Polytechnic Inst) 130 copies (KL, 28-58, 106)

KATLYAR, O.K., kand.tekhn.nauk

Actual microclimatological observations in a national dwelling in Khiva. Issl.po mikroklim.nar.zel.mest i zdan. i po stroi.fiz. no.2:110-123 '62. (MIRA 16:6)

1. Sredneaziatskiy politekhnicheskiy institut.
(Khiva--Dwellings--Design and construction)
(Khiva--Microclimatology)

KATLYAROU, N.

Honey and its characteristics. Rab. i sial. no.9:24 S '55. (MLRA 9:1)
(Honey)

SOV-107-58-8-13/53

AUTHOR: Katman, V. (Teya, North- Yenisey rayon, Krasnoyarsk oblast'

TITLE: Meeting the Demand More Fully (Polneye udovletvoryat' zaprosy)

PERIODICAL: Radio, 1958, Nr 8,p 10 (USSR)

ABSTRACT: The author complains of the neglect of radio amateurs in the villages in his area and the difficulty of obtaining components, particularly miniature ones. He asks for an issue of two- or three- tube receiver construction kits for amateurs in such areas.

1. Radio operators--USSR 2. Radio equipment--Availability

Card 1/1

CHERNOBAY, A.V.; SHEPELEVA, A.I.; ZUBKOVA, V.S.; Prinimali uchastiye: DELYATITSKAYA, R.Ya., KATMISSKAYA, E.V.; BOBRYSHEVA, A.M.

Spectrophotometirc study of N-vinylcarbazole and methyl methacrylate copolymers. Vysokom. soed. 7 no.6:1080-1084 Je '65. (MIRA 18:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut monokristallov, stsintillyatsionnykh materialov i osobo chistykh khimicheskikh veshchestv.

KATNEIN, L.; GOLDSTEIN, J.

"Production of molasses in Rumania."

TEKNIKA., Tirane, Albania., Vol. 5, No. 6, Nov./Dec. 1958

Monthly list of EAST EUROPEAN ACCESSIONS (EEAI), LC, Vol. 8, No. 7, July 1959, Unclas

ACC NR: AP6035098 SOURCE CODE: UR/0032/66/032/009/1098/1101

AUTHOR: Zatsepin, N. N.; Katnikov, B. N.

ORG: Institute of Physics of Metals, Academy of Sciences SSSR (Institut fiziki metallov Akademii nauk SSSR)

TITLE: Effect of magnetization on the ability of the eddy current method to detect superficial defects

SOURCE: Zavodskaya laboratoriya, v. 32, no. 9, 1966, 1098-1101

TOPIC TAGS: flow detection, magnetization, eddy current, metal surface, ballbearing steel

ABSTRACT: This article is an experimental study of the amplitude-phase characteristics of output electromotive force from artificial flaws, such as fissures in rods of ballbearing steel when they are checked by the eddy current method with a hollow coil and superimposed magnetization with a constant field. The feasibility of this magnetization and the detection of superficial flaws 0.2--0.3 mm deep is demonstrated. When inspecting products (particularly ferromagnetic) by the eddy current method a great deal of noise is imposed on the useful signal. This noise comes from structural and magnetic discontinuities, varying diameter of the article, etc. The signals from discontinuities (the background noise) often exceed the useful signal level. Interfering signal level may be reduced by superimposed magnetization of the products by constant magnetic field of strength H_. The present article studies the

Card 1/2 UDC: 620.179

efficiency of this method of reducing noise. With medium and high values of $H_{\sim}$ the magnetic permeability by volume of material to be inspected is equalized and becomes more uniform. With $H_{\sim}$>120--150 Oe the permeability curve of ShKh15 steel coincides with that of heavily cold-worked material; hence the signals from fluctuations in magnetic permeability of the material are now insignificant in comparison with the signals from actual flaws. The intensity of this optimum field $H_{\sim opt}$ depends both on the magnetic properties of the material inspected and the frequency of the variable magnetic field imposed. Since most magnetic and structural discontinuities have a high demagnetizing factor the value of $H_{\sim opt}$ is to be increased to several hundred oersteds. Change in amplitude and phase shift in the output emf from the measuring pickup were detected in 20-mm-diameter rods of annealed ballbearing steel artificially fissured. Orig. art. has: 8 formulas and 4 figures.

SUB CODE: 11 13, 14/ SUBM DATE: none/ ORIG REF: 004/ OTH REF: 001

KATNIKOVA, E.

"Action of Hemosporidin (LP_2) on the Central Nervous System". Uch. Zap. Kazanskovo Gos. Vet. In-ta, No. 60, pp 48-52, 1953.

In experiments of frogs it was shown that the curarelike action of hemosproidin, like the action of curare, is removed by Congo red and Try-pan blue, but only for a short time. In the end the animals die fron an apparently irreversible change in the central nervous system. In small doses, hemosporidin causes paralysis. From the foregoing it can be concluded that the central nervous system is more sensitive to hemosporidin than the peripheral. Against the background of the action of strychnine, the action of hemosporidin is more pronounced. (RZhBiol, No. 10, 1955)

SO: Sum No 884, 9 Apr 1956

GLOMBIK, Joachim, mgr inz.; KATO, Henryk, inz.; KUBIEN, Miroslaw, inz.

Organization of cross heading driving from stratum 504 to pit shaft III Bobrowniki in the Julain mine. Wiadom gorn 14 no. 12: 386-389 D '63.

KATOK, A.B.

Projections of a Hilbert cube on straight lines. Usp. mat. nauk 19 no.6:167-173 N-D '64 (MIRA 18:2)

1.1700

26581
S/129/61/000/008/014/015
E073/E535

AUTHORS: Astaf'yeva, Ye. V., Candidate of Technical Sciences, Bernshteyn, M.L., Candidate of Technical Sciences, Kidin, I.N., Doctor of Technical Sciences, Katok, A.M., Engineer and Tsypina, Ye. D., Engineer

TITLE: Strengthening of alloyed constructional steel by thermomechanical treatment

PERIODICAL: Metallovedeniye i termicheskaya obrabotka metallov, 1961, No.8, pp.54-56 + 2 plates

TEXT: The authors have tried out the effect of thermomechanical and thermo-mechanical-magnetic treatment of the steels 40KhlNVA (40Х1НВА) (0.39% C, 1.43% Cr, 1.59% Ni, 0.8% W) and 37KhN3A (37ХН3А) (0.40% C, 1.3% Cr, 3.9% Ni). From annealed steel, flat specimens of various thicknesses were produced, all of which were then deformed to a final thickness of 3 mm. The specimens were heated at 930-950°C for 20 min and, following that, they were hot rolled on a two-high mill or, alternatively, prior to rolling they were placed into a furnace where the temperature was maintained at 540 to 560°C (steel 40KhlNVA) or 470 to 480°C for the steel

Card 1/4

37KhN3A and held at these temperatures for 3 min. After rolling, the specimens were oil quenched. However, the specimens which were subjected to intermediate isothermal soaking were air quenched. Some of the specimens were quenched in a magnetic field produced by a solenoid and so spaced that all the specimens were under equal magnetic conditions. The field strength was low, about 1300 Oe, and therefore the influence of the thermomagnetic treatment was not fully apparent. The quenched specimens were subjected to low temperature tempering at 100 and 200°C with a holding time of 2 hours, followed by cooling in air. Prior to the experiments, the specimens were straightened and also ground along the contour and along the surface. Further experiments were carried out on specimens which prior to heating were ground and then quenched whilst inside punches. As a result of this the mechanical properties improved. Fig.3 shows the mechanical properties (HRC, σ_b, kg/mm^2, ψ, δ, % vs. degree of deformation, %) of the steel 37KhN3A after thermomechanical treatment in accordance with the following regimes: 1 - heating to 930°C, deformation (80% reduction), immediate quenching, tempering at 100°C; 2 - same as (1) except that tempering

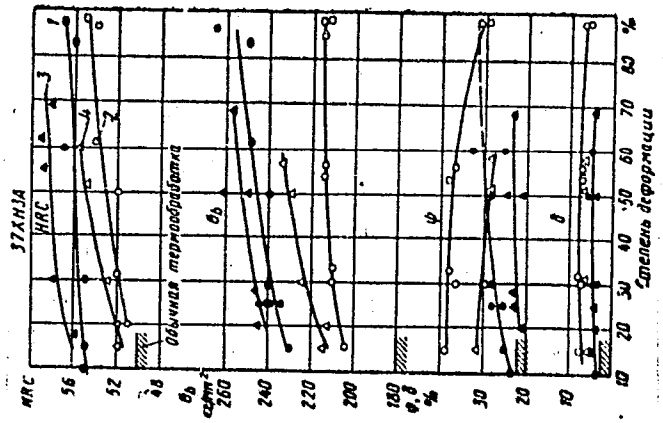
was at 200°C; 3 - heating to 930°C followed by cooling down to 470°C, deformation and tempering at 100°C; 4 - same as (3), tempering at 300°C. For comparison the appropriate values obtained by ordinary heat treatment are shown by a horizontal line with a shaded area (at the left-hand side of the plot).
The following conclusions are arrived at:
1. After thermomechanical treatment both steels showed stable UTS values of 245-255 kg/mm^2 with relative contractions of 25-30%.
2. The high mechanical properties after thermomechanical treatment are attributed to the high degree of dispersion and also to the fact that some structural elements are oriented.
3. From the technological point of view, the thermomechanical treatment with forming at temperatures above Ac_3 are favourable; such treatment yields an optimum combination of strength and ductility.
4. Application of a magnetic field during austenite-martensite transformation leads to more uniform mechanical properties and a slight increase in strength.
There are 3 figures and 2 Soviet references.

Card 3/4

Strengthening of alloyed ...

26581
S/129/61/000/008/014/015
E073/E535

Fig.3



Card 4/4

S/169/60/000/011/004/016
A005/A001

Translation from: Referativnyy zhurnal, Geofizika, 1960, No. 11, p. 23, # 13453

AUTHORS: Gayskiy, V.N., Katok, A.P.

TITLE: On the Seismism of Tadzhikistan in 1956

PERIODICAL: Tr. AN TadzhSSR, 1958, Vol. 94, pp. 3-13

TEXT: The article is a sequel of the yearly synopses on the seismism in the republic. Quarterly maps of the epicenters and a map of their densities are compiled from the observation data of 852 tremors, and the analysis of the properties of seismic events in 1956 is attempted. The analysis of the material corroborates the fundamental conclusion on the existence of two basic seismically active zones in the studied territory: the South-Tyan'-Shanskiy-zone and the Pamir-Hindu-Kush-zone. Between them, a weakly active zone is located containing individual small groups of epicenters. The Pamir-Hindu-Kush-zone is considerably more active, its quantity of epicenters is three times as high as in the South-Tyan'-Shanskiy-zone, and the majority of the foci (540 to 639) have the depth from 80 to 250 km. Longitudinal and transverse depth profiles through the Pamir-Hindu-Kush-zone were plotted, and the regularity in the focus distribution was stated.

Card 1/2

On the Seismism of Tadzhikistan in 1956

S/169/60/000/011/004/016
A005/A001

The main focus center lies between 36°.6 and 36°.8 N. lat., 70°.7 and 70°.9 E. long. and in depths of 160-200 km. The course curves of the seismic activity were analyzed for the various zones. The coefficient of the linear correlation between the curves is determined, equal to 0.93, and it is concluded that a connection exists between the course of the variation in the number of deep tremors and the tremors with normal focus depth.

R.I. Khovanova

Translator's note: This is the full translation of the original Russian abstract.

Card 2/2

L 2811-66 EWT(1)/EWA(h) GW

ACCESSION NR: AT5021046 UR/3160/64/012/000/0043/0053

AUTHORS: Katok, A. P.; Mirzoyev, K. M.

TITLE: Damping of transverse waves of deep focus Pamir Hindu Kush earthquakes

SOURCE: AN TadzSSR. Institut seysmostoykogo stroitel'stva i seysmologii. Trudy, v. 12, 1964. Sbornik statey po seysmologii (Collection of articles on seismology), 43-53

TOPIC TAGS: seismic wave, earthquake, damping factor

ABSTRACT: This paper discusses the damping of transverse seismic waves of deep-focus Pamir-Hindu Kush earthquakes in the 100-500 km range of epicentral distances. Focal depths ranged from 80 to 230 km. The work is a continuation of a previous paper by A. P. Katok (O zatukhanii prodol'nykh voln glubokikh Pamiro-Gindukushskikh zemletryaseniy. Tr. In-ta seysmostoik. stroitel'stva i seysmol. AN Tadzh. SSR, vol. 8, 1962). The damping factor was determined as a function of three factors with distance: maximum amplitude, mean amplitude, and the ratio of mean amplitude to mean period. It was found that the damping factor depends on magnitude of the quake and is related to the spectral content. The mean value of the damping

Card 1/2

L 2811-66

ACCESSION NR: AT5021046

factor declines with increase in logarithm of the energy of the quake. This is due primarily to decline in dominant frequencies with magnitude of the quake, since high frequencies are absorbed more strongly than low frequencies. Anomalies in amplitudes were observed at Obi Garm, and it is shown that these anomalies are related to the type of ground in the area of the station. The average values of the damping factor obtained in this paper, for both transverse and longitudinal waves, may be shifted because of the random distribution of seismic stations supplying the records. The factor for transverse waves ranged from 1.8 to 5.4. More reliable data may be obtained by using records from like instruments and by giving more attention to geological details. Orig. art. has: 5 figures and 3 tables.

ASSOCIATION: Institut seysmostoykogo stroitel'stva i seysmologii, AN TadzSSR (Institute for Earthquake-Proof Construction and Seismology, AN TadzSSR)

SUBMITTED: 00 ENCL: 00 SUB CODE: ES

NO REF SOV: 004 OTHER: 000

Card 2/2

L 15754-66 EWT(1)/EWA(h) GS/GW

ACC NR: AT6001136 SOURCE CODE: UR/0000/65/000/000/0009/0014

AUTHOR: Gayskiy, V. N.; Katok, A.P.

30
B+1

ORG: none

TITLE: Use of the theory of maxima and minima for determining the recurrence interval of strong earthquakes 12,44,55

SOURCE: AN SSSR. Sovet po seysmologii. Dinamika zemnoy kory (Dynamics of the Earth's Crust). Moscow, Izd-vo "Nauka", 1965, 9-14

TOPIC TAGS: earthquake, distribution function, least square method, chi square distribution, statistic analysis

ABSTRACT: The following theoretical distribution function is derived for earthquakes of maximum energy

$$P(x) = e^{-\theta-1.235(x-1.82)}$$

This function is compared with the actual distribution of maximum intensity earthquakes based on data for the Pamir-Hindu Kush region for 1955-1960.

Card 1/2

ACC NR: AT 6001136

The comparison shows satisfactory agreement. Agreement is also confirmed by the Pearson chi-square compatibility test. These data give convincing evidence for the applicability of Gumbel's statistical theory of extreme values for determining the recurrence interval of strong earthquakes. Formulas are given for using the method of least squares to determine the coefficients of recurrence graphs taking account of the weight of conditional equations. The theory makes it possible to use a greater amount of information on strong earthquakes which have taken place, thus reducing the limits of extrapolation and increasing the accuracy of predictions. Orig. art. has: 1 figure, 3 tables, 6 formulas.

SUB CODE: 08/ SUBM DATE: 10May65/ ORIG. REF: 004/ OTH REF: 004

Card 2/2

S/169/61/000/011/003/065
D228/D304

AUTHORS: Gayskiy, V.N., and Katok, A.P.

TITLE: Some questions connected with the study of seismic conditions in the instance of earthquakes of the Pamir-Hundukush zone

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 11, 1961, 11, abstract 11A117 (Tr. In-ta seysmostoyk. str.-va i seysmol., AN TadzhSSR, 7, 1960, 27 - 39)

TEXT: The energies were calculated for 1553 deep earthquakes of the Pamir-Hundukush zone in 1956-1958. Only 867 earthquakes with energy classes K = 3 - 7 were subsequently considered. A map of the seismic acticity was constructed. It was shown that the angular coefficient of the frequency diagram (γ) is not constant within the Pamir-Hindukush zone: γ equals 0.40 in the inner, more active part of the zone and 0.54 in its outer part. The distribution of the number of earthquakes was studied for the time intervals: one day, three days, one month, and one year. The distribution follows Pois-

Card 1/2

Some questions connected with ...

son's law. It is concluded that earthquakes are distributed in time independently of each other. The disturbance of the "stability" of the seismic conditions, related in particular to the large number of aftershocks, leads to the deviation from Poisson's distribution and may be detected from the regular increase of the degree of dispersion with the increase of the intervals into which the observational period is divided. [Abstractor's note: Complete translation]

Card 2/2

KATOK, A.P.

Attenuation of longitudinal waves of deep earthquakes in the Pamirs and the Hindu Kush. Trudy inst.seism.stroi.i seism 10:68-95 '62.
(MIRA 16:5)

(Pamirs--Seismic waves) (Hindu Kush--Seismic waves)

KATOK, A.P.; MIRZOYEV, K.M.

Attenuation of the transverse waves of the deep Pamir-Hindu Kush earthquakes. Trudy Inst. seism. stroi. i seism. 12:43-53 '64.
(MIRA 18:5)

ACC NR: AP7013733 SOURCE CODE: UR/0425/66/009/012/0020/002

AUTHOR: Katok, A. P.; Gayskiy, V. N.; Nersesov, I. L.; Mirzoyev, K. M.

ORG: Institute of Seismic Resistant Construction and Seismology, AN TadzhSSR (Institut seysmostoykogo stroitel'stva i seysmologii AN TadzhSSR)

TITLE: Analysis of fluctuations of the seismic regime

SOURCE: AN TadzhSSR. Doklady, v. 9, no. 12, 1966, 20-23

TOPIC TAGS: seismology, earthquake

SUB CODE: 08

ABSTRACT: The accuracy and reliability of determining the mean long-term frequency of earthquakes is dependent on the value and character of variations of the seismic regime at the time of observations. The available approach is inadequate and the authors therefore have developed a method for defining the characteristics of temporal variations of the seismic regime which makes it possible to estimate the accuracy of determination of the long-term frequency of earthquakes of different energy classes and detect the periods of systematic changes in the course of the process. Data accumulated in recent years indicates a more complex dependence between R (the measure of dispersion of the frequency of earthquakes) and the properties of the seismic process than believed to exist earlier; contrary to

Card 1/2 0933 2211

ACC NR: AP7013733

former ideas, it may not be a sufficiently objective characteristic of the seismic process. The parameter λ is proposed as an objective quantitative characteristic of the dispersion of the frequency of earthquakes of a particular energy in a given region, making it possible to define brief disruptions of the seismic regime. This paper was presented by Academician AN TadzhSSR O. V. Dobrovol'skiy on 10 September 1966. Orig. art. has: 3 figures, 3 formulas and 1 table. [JPRS: 40,105]

Card 2/2

NAZARUK, I.A.; KATOK, B.L., red.[deceased]; ORLOVA, V.Ya., red. izd-va; SHKLOVSKAYA, I.Yu., red.izd-va

[Equipment for enterprises of the metallurgical industry; a catalog] Oborudovanie dlia predpriiatii metallurgicheskoi promyshlennosti; katalog-spravochnik. Moskva, Metallurgizdat, 1963. 583 p. (MIRA 17:3)

1. Russia (1917- R.S.F.S.R.) Glavnoye upravleniye po snabzheniyu i sbytu produktsii tyazhelogo, traktornogo i stroitel'no-dorozhnogo oborudovaniya.

KATOK, I. V.

USSR/ Engineering - Refractory coatings

Card 1/1 Pub. 128 - 16/23

Authors : Katok, I. V., and Trykhmanova, V. M.

Title : Glass (refractory) coatings as a protection against nitration

Periodical : Vest. mash 35 2, 70 - 73. Feb 1955

Abstract : The refractory coating is described of the inner surfaces of Diesel engine cylinders at the Chelyabinsk Tractor Plant, as an effective method against nitration. The chemical composition of the refractory solution is given as follows: 67.5 - 73.5% SiO_2; 31.5 - 25.5% Na_2O; and not more than 0.6% Fe_2O_3 + Al_2O_3; 0.4% CaO and 0.14% S. A description of plating methods is given, together with types of baths used. Illustrations; table; drawings.

Institution: .....

Submitted: .....

SOV/137-57-1-1010

Translation from: Referativnyy zhurnal. Metallurgiya, 1957, Nr 1, p 130 (USSR)

AUTHORS: Katok, I. V., Trukhmanova, V. M.

TITLE: Bright Hardening of Components of the S-80 Tractor in Alkalies (Svetlaya zakalka detaley traktora S-80 v shchelochakh)

PERIODICAL: Tekhnol. transp. mashinostroyeniya, 1956, Nr 5, pp 15-22

ABSTRACT: The design of furnaces and accessories and the arrangement of equipment for the bright hardening and bright nitriding sections of an automated production line are presented. The technological process of bright isothermal and bright hot hardening in alkalies followed by tempering in the same medium is examined in detail for various components, and values of hardness achieved by the heat-treatment procedures described are given. See also RZhMet, 1956, Nr 10, abstract 10772.

A. B.

Card 1/1

KATOK, O.G.

USSR/Pharmacology. Toxicology. Chemotherapeutical Preparations V

Abs Jour : Ref Zhur-Biol., No 8, 1958, 37699

Author : Katok O. G.
Inst : Riga Medical Institute
Title : On the Characteristics of the Action of Tubasid , a New Antitubercular Drug. 6. Effect of Tubasid on some Phases of Nitrogen Metabolism. (Kkharakteristike deistviya novovo protivotuberkuleznovo sredstva tubazida. 6. Veyaniye tubazida na nekotoriye storoni azotistovo obmena)

Orig Pub : Sb. nauchn. rabot, Rizhsk. med. in-ta, 1957, 7, 56-71

Abstract : A single intraperotonial injection of tubasid to rabbits in a dose of 100 mg/kg caused a small increase in nitrogen residue in the peripheral

Card 1/2

USSR/Pharmacology. Toxicology. Chemotherapeutical Preparations V

Abs Jour : Ref Zhur-Biol., No 8, 1958, 37699

Abstract : blood of the animals without changing the total content of proteins in the serum. The prolonged administration of the drug in a dose of 20 ml/kg caused no changes in the quantity of residue nitrogen; the total quantity of proteins in the blood serum was slightly decreased because of a decrease in the proteins. The globulin content was slightly increased.

Card 2/2

KATOKOVA, M.M., KOTLENKO, N.I., BUILOV, S.V.

Karakul Sheep

Feeding and care of pregnant karakul ewes in the southern Ukraine. Kar. i zver. 5, No. 2 1952

Monthly List of Russian Accessions, Library of Congress, June, 1952 UNCL.

SADIKOV, P.P.; AHAN'YEVA, S.A.; LEBEDEVA, T.P.; SMIRNOV, Ye.K.; PRIGOROVSKIY, V.F., inzh., red.; TISHKOV, L.B.; KATOLICHENKO, V.A.; PANIN, A.V.; NOSKOV, Yu.A.; TRIFONOVA, M.G.; KLEYMENOV, Ye.I.; BOBROVA, Ye.N., tekhn.red.

[Technical equipment for large general-purpose freight yards] Tekhnicheskoe osnashchenie krupnykh gruzovykh stantsii obshchego pol'zovaniia. Moskva, Gos.transp.zhel-dor izd-vo. 1958. 186 p. (Moscow. Moskovskii institut inzhenerov zheleznodorozhnogo transporta. Trudy, no.161) (MIRA 12:2)
(Railroads--Yards--Equipment and supplies)

KATOLICHENKO, V.A., inzh.

Calculation of the time spent by containers in container depots. Vest. TSNII MPS 19 no.8:39-42 '60. (MIRA 13:12)

1. Vsesoyuznyy institut nauchnoy i tekhnicheskoy informatsii AN SSSR.

(Railroads--Freight cars)

KATOLICHENKO, V., inzh.

Operative planning of container transportation. Avt.transp. 39 no.2: 31-34 F '61. (MIRA 14:3)
(Transportation, Automotive—Freight)

KATOLICHENKO, V.A., inzh.

Device for a fork lift truck for handling containers. Mekh.i avtom.proizv. 16 no.8:24-25 Ag '62. (MIRA 15:9)
(Fork lift trucks)

KOGAN, L.A.; YEFIMOV, G.P.; DERIBAS, A.T.; PETROVA, T.I.;
KATOLICHENKO, V.A., inzh., retsenzent; ORLOVA, I.A., inzh., red.;
BOBROVA, Ye.N., tekhn.red.

[Demountable truck trailers and high-capacity containers]
Kontreilery i krupnotonnazhnye konteinery. Moskva
Izd-vo. -poligr. ob"ednienie m-va putei soobshchniia.
1962. 185 p. (Moscow. Vsesoiuznyi nauchno-issledovatel'skii
institut zheleznodorozhnogo transporta. Trudy, no.238).(MIRA 15:11)
(Piggyback transportation)

KATOLIKENKO, V.A., inzh.

Improved system of specialization in container service points.
Vest. TSNII MPS 24 no.6:46-50 '65. (MIRA 18:9)

GUBKOV, Vladimir Vladimirovich; MALAKHOV, Konstantin Nikolayevich; DERIGAS, A.T., inzh., retsenzent; KATOLICHENKO, V.A., inzh., retsenzent; TSARENKO, A.P., inzh., red.; VOROTNIKOVA, L.F., tekhn. red.

[Mechanization of loading and unloading operations on foreign railroads] Mekhanizatsiia pogruzochno-razgruzochnykh rabot na zarubezhnykh zheleznykh dorogakh. Moskva, Transzheldorizdat, 1963. 227 p. (MIRA 16:4)
(Materials handling--Equipment and supplies)
(Automation) (Railroads--Freight)

KATOLICHENKO, V.A., inzh.

Characteristics of grain transportation in the U.S.A. Zhel. dor. transp. 45 no.4:89-90 Ap '63. (MIRA 16:4)

(United States—Grain—Transportation)

KOGAN, L.A., kand.tekhn.nauk; KATOLICHENKO, V.A., inzh.

More accurate method of calucalting the warehouse space of freight yards. Vest.TSNIIMPS 21 no.7:29-32 '62. (MIRA 15:12)
(Railroads—Buildings and structures)

KATOLICKY, Arnost, inz.

Instruction on the operation and use of automatic computers.
Podn org 18 no.2: 73-75 F'64

1. Zavody V.I.Lenina, Plzen.

SHIROKOV, Matvey Yevdokimovich. Prinimali uchastiye: PROKOP'YEV, I.M., vrach; KATOLIK, G.M., vrach; KERBELEV, V.I., vrach; SHIROKOVA, N.S., vrach. KHODOS, Kh.G., prof., red.; BOHDONSKIY, S., red.; YURGANOVA, M., tekhn.red.

[Darasun Health Resort] Kurort Darasun. Izd.2., dop. i ispr. Chita, Chitinskoe knizhnoe izd-vo, 1960. 142 p.
(MIRA 13:11)

(DARASUN-KURORT--THERAPEUTICS, PHYSIOLOGICAL)

KATOLIKOV, G. V.

Ф. Е. Пажутанис

Переходный процесс в полупроводниковом диоде при протекании через него в прямом направлении импульсов тока малой длительности.

Я. С. Берман

Приближенный метод расчета переходных процессов в полупроводниковых триодах при больших сигналах.

Я. Д. Зорин

Исследование работы плоскостного полупроводникового триода в схеме генератора синусоидальных колебаний при больших уровнях сигнала.

М. А. Берг

Отрицательное сопротивление в двухэлектродных полупроводниковых приборах

С. А. Гаряинов

Полупроводниковые приборы с отрицательным сопротивлением и их применение в радиотехнических схемах.

10 июня

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Совместное заседание с секцией электронно-вычислительной техники.

В. Н. Геворкян

Динамический триггер на полупроводниковых приборах

А. Ю. Гордонов,
Е. Б. Гольдштейн,
Е. Н. Зорин,
Г. В. Католиков,
В. А. Калитвин

Специальные элементы цифровых вычислительных машин на полупроводниковых приборах.

Л. Н. Патрикеев,
Т. М. Агаханян,
Н. С. Белова,
В. А. Грибанов,
В. Н. Квасков,
В. Н. Лебедев,
А. Г. Филиппов,
Ю. Н. Фот

Комплекс полупроводниковых элементов и узлов цифровой вычислительной машины.

В. Н. Квасков

Фронты выходных импульсов в транзисторном ключе с общим эмиттером с учетом нелинейной емкости коллектора.

report submitted for the Centennial Meeting of the Scientific Technological Society of Radio Engineering and Electrical Communications im. A. S. Popov (VNORIE), Moscow, 8-12 June. 1959

KATOLIKOV G. V.

11 июня
(с 18 до 22 часов)

[illegible],
Р. Р. [illegible]

Методика испытания магнитофонных и магнитных головок.

А. А. [illegible],
Н. Н. [illegible]

О направлении намагничивающего поля при записи кольцевыми головками.

А. А. [illegible]

Об измерении уровня при магнитной записи звука.

В. А. Горохов

К теории магнитных сигналограмм.

12 июня
(с 10 до 16 часов)

М. В. Лауфер,
О. В. [illegible]

Вопросы теории и применения модуляционных магнитных головок.

62

А. Г. Арутюнов

Ферритографическое устройство для визуального наблюдения за несколькими одновременно протекающими процессами.

IV. СЕКЦИЯ ЭЛЕКТРОННО-ВЫЧИСЛИТЕЛЬНОЙ ТЕХНИКИ

Руководитель Л. И. Гутенмахер

10 июня
(с 10 до 16 часов)

Совместное заседание с секцией полупроводниковых приборов

В. Н. [illegible]

Динамический триггер на полупроводниковом триоде

А. Ю. [illegible],
Е. В. [illegible],
Е. Н. [illegible],
В. А. [illegible],
Г. В. Католиков

Специальные элементы цифровых вычислительных машин на полупроводниковых приборах.

Л. Н. [illegible],
Т. М. Агаханян,
Л. С. [illegible],

63

report submitted for the Centennial Meeting of the Scientific Technological Society of Radio Engineering and Electrical Communications im. A. S. Popov (VNORIE), Moscow, 8-12 June. 1959

KATOLIKOV, V.YE.

protsessov v mashinostroyenii i avtomatizirovannogo elektroprivoda v promyshlennosti. 3d, Moscow, 1959

Elektroprivod i avtomatizatsiya promyshlennykh ustanovok; trudy soveshchaniya (Electric Drive and Automation in Industrial Systems; Transactions of the Conference) Moscow, Gosenergoizdat, 1960. 470 p. 11,000 copies printed.

General Eds.: I.I. Petrov, A.A. Sirotin, and M.G. Chilikin; Eds.: I.I. Sod, and K.F. Silayev; Tech. Eds.: K.P. Voronin, and G.Ye. Larionov.

PURPOSE: The collection of reports is intended for the scientific and technical personnel of scientific research institutes, plants and schools of higher education.

COVERAGE: The book is a collection of reports submitted by scientific workers at plants, scientific institutes and schools of higher education at the third Joint All-Union Conference on the Automation of Industrial Processes in Machine Building and Automated Electric Drives in Industry held in Moscow on May 12-16, 1959. The Conference was called by the Academy of Sciences USSR, the Gosplan SSSR (State Planning Commission USSR), the GNTK SSSR, the Gosudarstvennyy Komitet po avtomatizatsii i mashinostroyeniyu (State Committee on Automation and Machine Building) and the Natsional'nyy Komitet SSSR po avtomaticheskomu upravleniyu (USSR National Committee on Automatic Controls) and prepared by the Nauchno-tekhnicheskiy komitet po avtomatizirovannomu elektroprivodu (Scientific and Technical Committee on Automated Electric Drives), the MEI (Moscow Institute of Energetics), the VNIIEM, the IAT (Institute of Automation and Telemechanics) of the Academy of Sciences USSR, and the Komissiya po tekhnologii mashinostroyeniya Instituta mashinovedeniya AN SSSR (Commission on the Technology of Machine Building of the Institute of Science of Machines of the Academy of Sciences USSR). It was the purpose of the Editorial Board to arrange the reports in a way which would ensure a relatively systematic presentation of theoretical and practical problems relating to electric drives and automatic controls of industrial mechanisms used in various branches of industry. Basic problems of automated electric drive and their solution are outlined. The book also contains articles on electric machinery and means of automation. Considerable attention is paid to noncontact automatic control systems, including systems with semiconductor devices and magnetic amplifiers, and to computers intended both for the analysis and the synthesis of linear and nonlinear automatic regulation and control systems. Reports already published in journals or official publications have been considerably abbreviated; those which have appeared in volume V of NIX EP transactions or in the journal "Elektrichestvo" are marked with an asterisk. No personalities are mentioned. References accompany some of the papers.

PART I. GENERAL PROBLEMS CONCERNING THE THEORY AND PRACTICE OF ELECTRIC DRIVE AND AUTOMATION OF CONTROL

Gutkin, B.M., Candidate of Technical Sciences, and A.G. Yefanov and V.Ye. Katolikov, Engineers. Automated Gas-Tube Controlled D-C Electric Drive of High-Power Hoisting Machinery at the "Saksagan'" and "Oktyabr'skaya" Mines 333

Vinogradov, A.L., Docent. Automated Induction Drive of a Mine Skip Hoisting Installation Controlled by Means of a Liquid Rheostat 338

Zhirov, L.G. Candidate of Technical Sciences. Automation of Hoisting Cage Installations by Means of Frequency Regulation of Speed* 341

Solov'yev, A.S., Engineer. Magnetic Clutches in Automated Mine Hoistings 342

Ivanov, A.A., Docent, Candidate of Technical Sciences. Automation of Mine Hoistings and Prospects of Its Development 344

Burgin, B.Sh., Engineer. Electric Equipment of a Deep Dredge With a 600 Liter Capacity Scoop 345

Gromov, V.S., Engineer, B.M. Gutkin, Candidate of Technical Sciences, and G.M. Kokorev, I.S. Motsokhayn, and V.S. Tulin, Engineers. Results of Introduction and Industrial Operation of Electric Drive Systems for the Elevators in Skyscrapers, Dwelling Houses, Industrial Buildings, and Structures* 351

Basharin, A.V., Professor, Doctor of Technical Sciences, F.I. Golubev, Candidate of Technical Sciences, V.G. Kepperman, Docent, Candidate of Technical Sciences, and A.Ya. Zykov, Candidate of Technical Sciences. Automatic Control Systems of the Main Electric Drive of Inclined and Vertical Ship Hoisting Equipment 355

Portnoy, T.Z., and M.G. Yun'kov, Engineers. New Electric Drive Systems for Drilling Oil and Gas Wells* 361

Kadymov, Ya.B., and M.M. Rasulov, Candidates of Technical Sciences. Automatic Voltage Regulation of Bottom-Hole Electric Motor Terminals During Oil Well Drilling 365

Portnoy, T.Z., Engineer, Ya.L. Kitinger, Candidate of Technical Sciences and M.G. Yun'kov, Engineer. Electronically Controlled 4,500-kw Induction Drive for the Stavropol'-Moscow Gas Pipeline 367

Strakhov, S.V., Doctor of Technical Sciences. Transient Electromechanical Processes in a Diesel-Synchronous Generator-Induction Motor System 371

KATOLIKOV, V.Ye., inzh.; SEN'KEVICH, A.A., inzh.

Electric drives and automatic control systems of mine hoisting machinery. Vest. elektroprom. 32 no.10:24-29 O '61. (MIRA 14:9)
(Electric driving) (Hoisting machinery)
(Electricity in mining)

KATOLIKOV, V.Ye., inzh.

Automatic control of a multirope cage hoist. Gor. zhur. no.9: 48-53 S '63. (MIRA 16:10)

1. TSentral'noye konstruktorskoye byuro "Elektroprivod" Vsesoyuznogo nauchno-issledovatel'skogo instituta elektromekhaniki.

EFROS, V.V.; KATOL'NIK, V.M.; STOLBOV, M.S.

Studying of the cooling system of the D37M engine. Trakt.i sel'khozmash. 32 no.4:8-12 Ap '62. (MIRA 15:4)

1. Vladimirskiy traktornyy zavod.
(Tractors—Engines)

L 07863-67 EWT(d)/EWT(l)/EWP(m)/EWT(m)/EWP(f)/EWP(c)/EWP(v)/EWP(k)/EWP(l) IJP(c)
ACC NR: AP6011246 FDN SOURCE CODE: UR/0413/66/000/006/0090/0090

AUTHORS: Zensin, Yu. A.; Bobrov, V. P.; Gavrilov, A. K.; Chirik, P. I.; Katol'nik, V. M.

68
B

ORG: none

TITLE: An aerodynamic chamber for inspecting the cylinders and heads of internal combustion engines by their aerodynamic resistance. Class 42, No. 179965

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 6, 1966, 90

TOPIC TAGS: aerodynamic test, aerodynamics, internal combustion engine, high pressure chamber

ABSTRACT: This Author Certificate presents an aerodynamic chamber for inspecting the cylinders and heads of internal combustion engines by their aerodynamic resistance. The chamber is connected to a measuring pipe which contains a throttle provided with a device for holding the inspected object and with a U-shaped liquid manometer. The latter records the pressure at the entrance to the measuring pipe, this pressure being indicative of the aerodynamic resistance offered by the inspected object. To provide a means for marking the object being inspected, the device contains a marking equipment with several scribers capable of producing a symbol corresponding to a given aerodynamic resistance. The liquid manometer of the pipe is provided along its

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height with photoresistors responding to the movement of the liquid level. The number of these photoresistors is equal to the number of scribers, and each resistor is electrically connected with one of the markers. To check the pressure in the chamber, a single photoresistor may be placed on the liquid manometer of the chamber and may be electrically connected to the marking device.

SUB CODE: 20,13/ SUBM DATE: 04May64

Card 2/2 bc

ZENZIN, Yu.A.; BOBROV, V.P.; GAVRILOV, A.K.; CHIRIK, P.I.; KATOL'NIK, V.M.

Stand for controlling the aerodynamic resistance of cylinders and heads of air-cooled engines. Trakt. i sel'khozmash. no.8: 14-15 Ag. '65. (MIRA 18:10)

1. Sibirskiy avtomobil'no-dorozhnyy institut im. V.V. Kuybysheva i Vladimirskiy traktornyy zavod im. A.A. Zhdanova.

KATOMIN, BORIS NIKOLAYEVICH

RUTES, Viktor Savel'yevich; KATOMIN, Boris Nikolayevich; KORNFEL'D, L.I., nauchnyy redaktor; SERBERNIKOVA, L.A., redaktor; MATUSEVICH, N.L., tekhnicheskiy redaktor

[Continuous casting of steel] Nepreryvnaia razvivka stali. Moskva, Vses.uchebno-pedagog.izd-vo Trudrezervizdat, 1957. 81 p. (MLRA 10:9)
(Steel--Metallurgy) (Founding)

AUTHOR KATOMIN, B.N., RUTES, V.S. PA - 2162

TITLE The Investigation of the Process of Uninterrupted Racking of Steel by Means of Radioactive Isotopes (Issledovaniya protsessa nepreryvnoy razlivki stali s pomoshch'yu radioaktivnykh izotopov).

PERIODICAL Izvestiia Akad. Nauk SSSR, Otdel.Tekhn., 1957, Nr 1, pp 123-135 (U.S.S.R.)

Received 3/1957 Reviewed 4/1957

ABSTRACT Investigations were carried out in the ZNIICHM (Central Scientific Research-Institute for the Metallurgy of Iron) and the processes of heat transfer and of the crystallization of steel in the case of uninterrupted racking were examined. The dependence between the depth of the liquid phase and distribution of the crystallisation front and the velocity in the blank, the quantity of the transferred heat, the velocity of the filling, the intensity of the cooling, the physical properties of the metal and the peculiarities of the construction of some parts was determined by the radiographic method. The following conclusions were arrived at: the forming of a solid bark on the blank in the crystallizer is due to the same rules that determine the growth of the bark on the occasion of the hardening of the steel block in the mold in the initial stages of crystallization. The amount of the mean hardening coefficient depends on the penetration of water into the gap between the blank and the walls of the crystallizer, which leads to a growth of the thickness of the bark at the outlet of the crystallizer. Gas pressure which occurs as the result of shrinking between the walls of the crystallizer and the

Card 1/2

The Investigation of the Process of Uninterrupted Racking of Steel by Means of Radioactive Isotopes.

surface of the solid bark exercises a decisive influence on the regularity of heat elimination and on the crystallization of steel in the crystallizer. The thermal resistance of the gap is about 90% of the total resistance of the system. The average hardening velocity of the blank in the zone of renewed cooling does not depend on the intensity of the renewed cooling. This renewed cooling is, from the technological point of view, only correct if it has a zone extension which warrants termination of the hardening process in this zone and regularly supplies the quantities of water which are necessary for the uninterrupted drop of the surface temperature until the termination of the continuous hardening of the blank. However, this temperature must not drop to that of transition into the field of elastic deformations.
(10 illustrations and 5 tables)

ASSOCIATION Not given
PRESENTED BY
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KATOMIN, B.N.

PHASE I BOOK EXPLOITATION SOV/5407

Afanas'yev, S.G., Candidate of Technical Sciences; B.S. Barskiy, Docent; Yu.Ye. Yefroymovich, Candidate of Technical Sciences; V.Yu. Kaganov, Candidate of Technical Sciences; B.N. Katomin, Engineer; V.Ye. Leykin, Engineer; I.N. Lur'ye, Engineer; O.A. Mikhaylov, Candidate of Technical Sciences; A.Ye. Netesin, Engineer; M.Ye. Orman, Engineer; V.S. Rutes, Candidate of Technical Sciences; and Ye.A. Shneyerov, Candidate of Technical Sciences.

Tekhnicheskiy progress v chernoy metallurgii SSSR; staleplavil'noye proizvodstvo (Technological Progress in Soviet Ferrous Metallurgy; Steelmaking Industry) Moscow, Metallurgizdat, 1961. 495 p. Errata slip inserted. 3,200 copies printed.

Sponsoring Agencies: Gosudarstvennyy nauchno-tekhnicheskiy komitet Soveta Ministrov SSSR. Tsentral'nyy institut informatsii chernoy metallurgii.

Ed. and Scientific Ed.: G.N. Oyks, Professor, Doctor of Technical Sciences; Director of the Central Institute for Information on Ferrous Metallurgy: N.B. Arutyunov; Chief Ed.: Ya.A. Gol'din; Ed. of the Central Institute for Information on Ferrous Metallurgy: L.I. Khoras; Ed. of Publishing House: V.I. Ptitsyna; Tech. Ed.: P.G. Islent'yeva.

Card 1/7

8

Technological Progress (Cont.) SOV/5407

PURPOSE: This book is intended for technical and scientific personnel in the metallurgical and machine industries, and may also be used as a textbook by students in schools of higher education and tekhnikums.

COVERAGE: A review is made of the basic stages in the development of open-hearth, electric-hearth, electric-furnace, and converter steelmaking processes in the USSR. The present status of ferrous metallurgy and prospects for the future are examined. Present trends in the design, automation, and mechanization of steelmaking equipment are given. The state of the organization and mechanization of repairs in steelmaking plants, and methods of equipment maintenance are described. Problems in the process of steelmaking (the use of oxygen and vacuum, processing of phosphorus irons, improvement of the manufacture of individual types of steel, and steel casting) are discussed at length. No personalities are mentioned. There are 329 references: 317 Soviet, 9 English, 2 German, and 1 French.

TABLE OF CONTENTS:

STEEL MANUFACTURE IN OPEN-HEARTH FURNACES

I. Basic Stages in the Development of the Open-Hearth Process 3

Card 2/7

22313
S/133/61/000/004/002/015
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AUTHORS: Rutes, V. S., Candidate of Technical Sciences; Katomin, B. N., Engineer; Kan, Yu. Ye., Engineer; Petrov, V. K., Engineer, and Lobanov, V. V., Engineer

TITLE: Adopting the process of the continuous casting of carbon steel at the Novo-Lipetsk metallurgicheskiy zavod (Novo-Lipetsk Metallurgical Plant)

PERIODICAL: Stal', no. 4, 1961, 311 - 317

TEXT: Two units for continuous casting of carbon steel have been in operation in the Novo-Lipetsk Metallurgical Plant since 1959 and 1960, respectively. The units used for casting 150 x 620, 150 x 770 and 170 x 1020 mm slabs are arranged vertically (TsNIIChM-design), the pits are 16.5 m deep, while the 90-ton ladle is mounted 9 m above the workshop floor. Metal is poured into the crystallizer via a 5 - 7-ton intermittent ladle. The unit consists of two independent machines, each containing a crystallizer, secondary system, pulling stands, gas cutters, discharge devices (Fig. 1). The intermittent ladle is provided with spouts, (28 - 30 mm in diameter),

Card 1/2

Adopting the process of the continuous casting...

in accordance with the composition of the steel. The crystallizer consists of double-sheet walls, 1.5 m long, the inner sheet is made of chromium-bronze (БрХр0.6 = BrKhr0.6), the outer of steel. Cooling water is supplied at a rate of 150 - 250 cu m/h to flow between the sheets. The crystallizer reciprocates vertically over 20 mm (downward) by means of a roller-system, synchronously with the slab, while its upward motion is 3-times faster than that of the slab. The inoculator (9 m long) has a special groove on its upper part (in the crystallizer), ensuring strong bond with the slab. The cooling device, 6.5 m long, is provided with frames, connected with 120-mm diameter rolls. The frames can be adjusted to the slab size. The cooling area is divided into 3 zones, the water flow can be independently controlled on each side and for each zone. Water consumption as a function of slab section-size and type of metal varies between 30 and 75 cu m/h. The slabs are removed from the crystallizer by pulling equipment consisting of four 300-mm diameter guiding beams, which are pressed to the slabs by means of a hydraulic system (40 - 60 atmospheres). Immediately after discharging the slabs are cut to pieces 6 - 8 m long, by 2 oxy-acetylene cutters with 3-m stroke. The equipment is completed with a roll-over machine and conveying

Card 2/5

facilities. As this was the first continuous casting machine of such large size, literature gave no indications as to its operation. In the beginning 150 x 620 mm slabs were cast and in the first month not one out of 12 ladles could be poured completely, while in the second month out of 18 ladles 6 could be poured. Operation had to be interrupted mostly due to the troubles with the intermittent ladle, some other parts of the equipment and the deformation of slabs observed under the discharge device. This drawback could be eliminated by improving secondary cooling conditions. Also the faulty operation of the spouts, rupture of the plugs could be eliminated. A frequent cause of trouble was the tendency of the metal to break through under the crystallizer, mainly by the slag inclusions which are difficult to remove from the narrow side of slabs. The crystallizer operation was often affected by water-leakage through the sheets, due to their burning out. The greater the slabs, the simpler and easier the casting process. Since November 1959, 170 x 1020 mm slabs have been produced from killed carbon steel. The amount of faulty castings was reduced from 30.4% to 2.9% in 8 months. The temperature of the liquid metal in the 90-ton ladle was tested in the 1580° - 1640°C range. The optimum temperatures are 1600° - 1630°C. Below 1600°C there is the risk of the metal clogging the spouts of the inter-

Adopting the process of the continuous casting...

mittent ladle, whereas above 1630°C rupture of the metal under the crystallizer and longitudinal fractures on the broad sides of the slab can be expected. The optimum pouring speed for 150 x 620 mm (A) slabs was 0.85 - 0.90 m/min, for 150 x 770 mm (B) slabs: 0.75 - 0.80 m/min and for 170 x 1020 mm (C) slabs: 0.50 - 0.60 m/min. The metal consumption - in the same sequence - was: A: 550 - 610 kg/min, B: 690 - 740 and C: 700 - 850 kg/min. When pouring under the lowest rate, the spouts of the intermittend ladle tend to get clogged and due to the longer pouring time, the operation of the ladle-stoppers was affected. An increase of the pouring rate above the maximum (0.90 m/min) may result in rupture of the metal under the crystallizer. For cooling water consumption (in the crystallizer) the following values were found (in cu m/h): slabs A: 150 - 200; slabs B: 195 - 210; slabs C: 225 - 250. Water consumption for secondary cooling, (in cu m/h): slabs A: 31 - 34, slabs B: 37.5 - 41, slabs C: 44 - 52. Heat dissipation, (10^6 cal/h): slabs A: 1.7; slabs B: 1.9; slabs C: 2.0. In the early operation of the equipment waste was considerable: in November 1959 26.4%. The main defects are longitudinal cracks, leaks, beads, slag inclusions, etc. Longitudinal surface cracks appeared frequently which could be prevented by pouring the

Card 4/5

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Adopting the process of the continuous casting...

metal into the crystallizer excentrically, at 250 mm from the thin wall of the crystallizer and by applying the optimum sulfur and carbon content of the metal. At a carbon content of 0.14% and a sulfur content below 0.028% no cracks formed; at 0.17% carbon content the allowed sulfur content is 0.020%. The other types of defects could be eliminated by improving the operation of the intermittent ladle, stoppers, etc. Bead formation was prevented by maintaining the required level of the metal in the crystallizer; by reducing the coating of the intermittent ladle and improving the removal of slag the amount of slag inclusions were reduced. In March 1960, the rate of flawless 170 x 1020 mm slabs from killed carbon steel was as high as 94 - 96%, the maximum waste: 1.9%. The slabs were rolled into 2.5 - 3.0 mm and 10 - 25 mm sheets and it was found that sheets of cast slabs have the same plasticity and surface-quality as those made of rolled slabs. Mechanical properties, microstructure and macrostructure of the cast slabs meet the standard requirements. There are 4 figures and 2 tables.

ASSOCIATION: TsNIICHM and Novo-Lipetskiy metallurgicheskiy zavod (Novo-Lipetsk Metallurgical Plant)

Card 5/8 5

S/130/61/000/012/003/006
A006/A101

AUTHORS: Druzhinin, V. P., Yevteyev, D. P., Katomin, B. N.

TITLE: The effect of the crystallizer on crack formation in continuous-cast ingots

PERIODICAL: Metallurg, no. 12, 1961, 12-15

TEXT: Experience has shown that cracks in continuous-cast steel ingots are caused by the design and assembly of the crystallizers, and some other factors. To reveal the location and time of crack formation, experiments were made determining the rate of increase of the crust thickness of the ingot in the crystallizer. It appeared that the initial stage of formation of the continuous-cast ingot proceeds not uniformly: the thickness of the crystallized crust is different. This can be explained by the scouring activity of the metal flow supplied, and by non-uniform heat emanation due to the formation of a gas gap between the ingot and the crystallizer wall. To determine the effect of the gas gap on non-uniform crystallization and hot crack formation, thermocouples and feeler gauges operating on the principle of tensometry were mounted on the copper walls of one of the crystallizers. To evaluate the magnitude of heat flows

Card 1/2

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A006/A101

The effect of the crystallizer ...

thermocolumns were mounted into the larger crystallizer walls. The readings were registered by high-speed electronic potentiometers. The experiments show that during teeming the crystallizer walls are deformed and the distortion of their rectilinear shape attains 0.6 - 0.7 mm. The wall deformation affects considerably the heat flow from the ingot to the crystallizer. The effect of the gas gap on crack formation was investigated by applying a vertical 200 mm long, 8 mm wide and 0.3 mm deep groove on the crystallizer wall. When the depth was increased to 0.6 - 0.7 mm, longitudinal straight cracks appeared, whose location coincided with the groove. It was observed that cracks were not formed if the gas gap arose on different spots over the ingot perimeter and lasted a short time. If the gas gap arose on a definite spot and lasted longer, the ingot crust was weakened and cracks appeared. An extended gas gap can only be caused by a deformed area on the crystallizer wall below the metal level; then the moving crust of the ingot does not reach the wall, is heated and bursts. The location of the crack on the ingot wall depends in this case on the extent of the deformed area of the wall. A slight increase of the wall rigidity reduced sharply the amount of external cracks when teeming killed low-carbon steel, and eliminated cracks when teeming rimming steel. There are 5 figures.

ASSOCIATION: Novotul'skiy metallurgicheskiy zavod (Novotul'skiy Metallurgical Plant)

Card 2/2

DRUZHININ, V.P.; YEVTEYEV, D.P.; KATOMIN, B.N.

Influence of ingot molds on crack formation in continuous ingots. Metallurg 6 no.12:12-15 D '61. (MIRA 14:11)

1. Novotul'skiy metallurgicheskiy zavod.
(Continuous casting--Defects)
(Ingot molds)

CHIGRINOV, M.G.; KATOMIN, B.N.; LOBANOV, V.V.

Crust formation on steel-pouring nozzles of intermediate ladles in continuous steel casting equipment. Stal' 23 no.3:215-217 Mr '63. (MIRA 16:5)

1. TSentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii i Novolipetskiy metallurgicheskiy zavod.
(Continuous casting--Equipment and supplies)

KATOMIN, B.N.; CHIGRINOV, M.G.; KANAREYKIN, N.F.; ZUBAREV, A.G.

Practice of continuous pouring of killed carbon steel in wide slabs. Metallurg 9 no.2:12-14 F '64. (MIRA 17:3)

1. TSentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii im. I.P.Bardina i Novolipetskiy metallurgicheskiy zavod.

AFANAS'IEV, S.G., kand.tekhn.nauk; BARSKIY, B.S., dotsent; YKFROYMOVICH, Yu.Ye., kand.tekhn.nauk; KAGANOV, V.Yu., kand.tekhn.nauk; KATOMIN, B.N., inzh.; LEYKIN, V.Ye., inzh.; LUR'YE, I.N., inzh.; MIKHAYLOV, O.A., kand.tekhn.nauk; NETESIN, A.Ye., inzh.; ORNAH, M.Ye., inzh.; RUTES, V.S., kand.tekhn.nauk; SHNEYEROV, Ya.A., kand.tekhn.nauk; OYKS, G.N., prof., doktor tekhn.nauk, nauchnyy red.; GOL'DIN, Ya.A., glavnyy red.; PTITSYNA, V.I., red.izd-va; ISLENT'YEVA, P.G., tekhn.red.

[Technological progress in Soviet ferrous metallurgy; steelmaking] Tekhnicheskii progress v chernoi metallurgii SSSR; staleplavil'noe proizvodstvo. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1961. 493 p.

(MIRA 14:4)

(Steel--Metallurgy)

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found that ZrSiCl luminophors luminesced strongly in the blue only when O_2 was present. The presence of oxygen inhibited the luminescence, and it is concluded

Card 1/2

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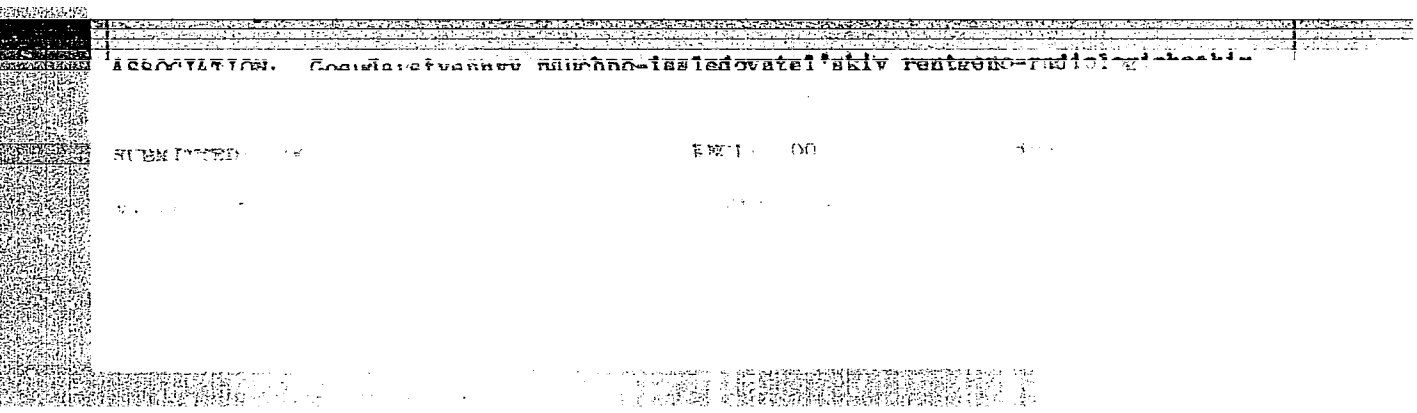

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B104/B201

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AUTHORS: Gurvich, A. M. and Katomina, R. V.

TITLE: Choice of fluorescent material for Roentgen screens

PERIODICAL: Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, v. 25, no. 4, 1961, 506-508

TEXT: The present paper has been read at the 9th Conference on Luminescence (Crystal Phosphors), Kiyev, June 20-25, 1960. The authors studied the luminescence intensity of Roentgen screens prepared from the principal commercial Roentgen luminophores as dependent upon the wavelength of X-rays in the range 0.11 - 1.8 A. Measurements were made with a photoelectric photometer with antimony-cesium photocells from the side facing the source of radiation. The experimental conditions have been described in a previous paper (Ref. 1: Gurvich A. M. et al. Novosti med. tekhniki, No. 1, 47 (1961)). Results are collected in Figs. 1 and 2, and in the table. The conclusion is drawn from them that the (Zn,Cd)S-Ag luminophore is best suited for electron-optical amplifiers of X-ray pictures. Above 30 kv_{eff} the advantage offered by (Zn,Cd)S-Ag luminophores as confronted with

Card 1/5

Choice of fluorescent...

ZnS-Ag screens grows with an increase of E. If a Sb-Cs photocathode is used as pick-up of screen radiation, the optimum CdS content in the (Zn,Cd)S-Ag compound will be 40 % of the total sulfide weight. For fluoroscopic screens, in which a panchromatic Pф-3 (RF-3) film serves as pick-up of radiation, the optimum CdS content is between 40 and 50 %. There are 2 figures, 1 table, and 4 Soviet-bloc references.

ASSOCIATION: Gosudarstvennyy nauchno-issledovatel'skiy rentgenoradiologicheskiy institut Ministerstva zdravookhraneniya RSFSR (State Scientific Research Institute of roentgenology and radiology Ministry of Hygiene RSFSR)

Legend to Fig. 1: 1a) relative luminescence intensity of Roentgen screens (70 mg cm^{-2}) as a function of hardness of X-radiation. 1) $CaWO_4$(Na_2HPO_4) (Standard); 2) $CaWO_4$($CaCl_2$); 3) (Ba-Pb)SO_4(Na_2SO_4,$NaHSO_4$); 4) cub. ZnS-0.02 % Ag($MgCl_2$ NaCl); 5) hex. 54ZnS·46CdS-0.01Ag(NaCl); 1б) intensity ratio between luminescence of ZnS-0.02 % Ag screen and (Zn,Cd)S-Ag screen as a function of hardness of X-radiation.

GURVICH, A. M.; KATOMINA, R. V.

Some problems in the physics of an X-ray screen. Nov. med. tekh. no.1:47-59 '61. (MIRA 14:12)

1. Gosudarstvennyy nauchno-issledovatel'skiy rentgeno-radiologicheskiy institut.

(X RAYS—APPARATUS AND SUPPLIES)

GURVICH, A.M.; KATOMINA, R.V.; NIKIFOROVA, A.P.

Chemical nature of the luminescence centers in luminophors based on zinc sulfide and cadmium sulfide. Izv. AN SSSR. Ser.fiz. 29 no.3:507-511 Mr '65. (MIRA 18:4)

1. Gosudarstvennyy nauchno-issledovatel'skiy rentgeno-radiologicheskiy institut.

L 20489-66 EWT(m)/EWP(t)/ETI IJP(c) JD

ACC NR: AP6013072 SOURCE CODE: UR/0048/66/030/004/0649/0653

AUTHOR: Gurvich, A. M.; Il'ina, M. A.; Katomina, R. V.; Nikiforova, A. P. 57 E

ORG: State Scientific Research Roentgeno-radiological Institute (Gosudarstvennyy nauchno-issledovatel'skiy rentgeno-radiologicheskiy institut)

TITLE: Activation of zinc 27 and cadmium 27 sulfides by halogens and Group III elements /Report, Conference on Luminescence held in Riga, 16-23 September 1965/

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 30, no. 4, 1966, 649-653

TOPIC TAGS: crystal phosphor, zinc sulfide, cadmium sulfide, luminescence, luminescence spectrum, forbidden band

ABSTRACT: The work was concerned with investigation of activation of zinc and cadmium sulfides by elements that are usually termed coactivators; however, when the said element is the only real impurity present and is responsible for distinctive luminescence it is justifiable to call it an activator in its own right. To clarify the role of the heating medium there were sintered batches of equal amounts of ZnS and CdS with 5% NaCl, all at 950°C but in different gases. The luminescence spectra of the products under 365 mμ excitation at -180° exhibit all three characteristic bands, but with greatly varying relative intensities, depending on the medium. Potassium chloride and the alkali bromides and iodides yielded similar results. The formation of $ZnCl_2$ (or $CdCl_2$) from NaCl in the sulfide is discussed, as is the solubility of $ZnCl_2$ in ZnS.

Card 1/2

L 26489-66

ACC NR: AP6013072

The technology of activation of ZnS with aluminum is described. Like aluminum, gallium and indium can be introduced into zinc sulfide either in metallic form (in this case it is desirable to have some excess sulfur in the sulfide) or in the form of a suitable compound, such as the nitrate. In activating powdered CdS with indium it was found that in the case of heating dechlorinated (with H_2S) CdS with metallic In in a sealed quartz tube at 700° there is obtained a phosphor with bright green luminescence under stimulation at room temperature by the 365 mμ line of Hg. Investigation showed the presence of one narrow band (half-width 38 mμ) at 520 mμ, i.e., close to the position of the "edge" band. Upon cooling this band becomes narrower and shifts to the long wavelength side, that is, acquires the position and configuration of the "edge" band. This effect is distinctive, for ordinarily green photoluminescence of CdS is observed only at low temperatures and is evinced in a form of a relatively broad band. It is suggested that in the presence of indium the green centers lodge at special locations in the crystal (possible near the surface), where they not only distort the normal band structure, but also broaden the forbidden band. Orig. art. has: 3 figures.

SUB CODE: 20/ SUBM DATE: 00/ ORIG REF: 012/ OTH REF: 017

Card 2/2

KATON, Laszlo, dr.

Modern principles of health education in the fight against tuberculosis. Nepegeszsegugy 44 no.3:86-91 Mr '63.

1. Kozlemeny a Szamuely Tibor Tbc Gyogyintezetebol.
(TUBERCULOSIS) (HEALTH EDUCATION) (BCG VACCINATION)
(COMMUNICABLE DISEASE CONTROL)

22799

18.3100A also 1087

S/136/61/000/005/002/008
E073/E535

AUTHORS: Belyayev, A.I., Firsanova, L. A., Vol'fson, G.Ye. and Katon, Ya. Sh.

TITLE: On the Problem of Interaction of Barium Chloride with Cryolite Melts and its Influence on the Technology of Electrolytic Refining of Aluminium

PERIODICAL: Tsvetnyye metally, 1961, No.5, pp.43-45

TEXT: In electrolytic refining of aluminium by means of the three-layer method, an electrolyte is used consisting of barium chloride, cryolite, aluminium fluoride and sodium chloride. Chemical analyses of electrolytes reveal the presence in the electrolytes of barium fluoride in quantities reaching 17 to 18%. This indicates interaction in such melts of barium chloride with the fluorides, for instance in accordance with the reaction:

$$3BaCl_2 + 2AlF_3 \rightarrow 3BaF_2 + 2AlCl_3 \quad (1)$$

The results are given of analyses of the electrolytes from baths for electrolytic refining of Al with various cryolite ratios, Table 1. (K.o. - cryolite ratio; composition of the electrolyte,

Card 1/4

wt.%). It can be seen that with decreasing cryolite ratios, from 1.94 to 1.33 (i.e. with increasing AlF_3 content), the content of BaF_2 increases from 1.89% to 17.31%. According to the reaction, Eq.(1), in addition to BaF_2, volatile $AlCl_3$ forms, which leads to a partial loss of Cl. For the purpose of verifying the possibility of the reaction expressed by Eq.(1), synthetic mixtures of salts were produced with cryolite ratios between 1 and 3 containing 3 to 60 wt.% $BaCl_2$. This mixture was maintained in the molten state for 1 hour at 1000°C and then rapidly cooled and analysed chemically for the contents of Na, Al, Ba and Cl. From the analytically determined Ba and Cl contents, the respective content of $BaCl_2$ was calculated and these values were compared. A plot is made of the analytically determined $BaCl_2$ content (%, based on the % of Cl_2 in the melt) as a function of the $BaCl_2$ content in the charge for cryolite ratios (K.o.) of 2.8 to 1.0 (the uppermost line applies to the initial $BaCl_2$ content in the charge). The results show that the reaction expressed by Eq.(1) does indeed take place and leads to an accumulation of BaF_2 in the electrolyte. This is brought about by an increase in the AlF_3 content

On the Problem of Interaction ... S/136/61/000/005/002/008
E073/E535

of the melt, i.e. by a decrease in the cryolite ratio. The following conclusions are arrived at:
1. Considerable interaction was observed in melts with cryolite ratios below 2, whereby as a result of this interaction BaF_2 forms which has an unfavourable influence on the properties of the melt.
2. To improve the operation of industrial baths in electrolytic refining of Al, the cryolite ratio must not drop below 1.7.
3. It is necessary to develop a rapid method of analysis of the electrolyte which is applicable to electrolytic refining of Al for the purpose of systematic checking of the composition and maintaining an optimum cryolite ratio. There are 1 figure and 2 tables.

ASSOCIATIONS: Institut tsvetnykh metallov imeni M. I. Kalinina (Institute of Nonferrous Metals imeni M.I.Kalinin) (Belyayev and Firsanova).
Volkhovskiy alyuminiyevyy zavod (Volkhov Aluminium Works) (Vol'fson and Katon)

Card 3/4

SORESCO, Maria; NICOLAU, G.; KATONA, Elena

Value of the microreaction induced with cardiolipin antigen — VDRL-- as compared with the Meinicke microreaction (MR-II) in cerebrospinal fluid. Arch. Roum. path. exp. microbiol. 23 no.4: 845-850 D '64.

1. Travail de l'Institut "Dr. I. Cantacuzino", Laboratoire d'Antigenes-Syphilis. Submitted April 18, 1964.

KATONA, Emil

Painting of rain water reserviors, gutters and sheet iron roofs.
Mezogazd techn 5 no.3:12-13 '65.

KATONA, Emil, dr., tudomanyos munkatars

Workshop experiences with dyeing metal surfaces and the conditions of a correct and economical dyeing. Gep 13 no.4:139-142 Ap '61.

1. Nehezvegyipari Kutato Intezet, Veszprem.

KATONA, Emil, dr.

Again on "Alhibit." Auto motor 15 no.19:8 6 0 '62.

1. Nehezvegyipari Kutato Intezet tudomanyos munkatarsa.

KATONA, Emil

Correct and economical dyeing. Mezogazd techn 4 no.11: 18-19 '64.

KATONA, Emil

Protection of storage houses and roofs against corrosion.
Mezogazd techn 5 no.2:12-13 '65.

JOSFAY, Gyorgy; EBERGENYI, Ilona; VIG, Aniko; KATONA, Eva; GUGCSO, Hilda(Csepel); KOKAY, Peterne; VESZPREMI, Barnane, dr.

Economical women - outstanding innovators. Ujit lap 13 no.24:12-13 D '61.

1. Kerekpargyar technikusa, Csepel (for Ebergenyi) 2. Motorkerekpargyar technologusa, Csepel (for Vig) 3. Femmu kutatomarnoke, Csepel (for Katona) 4. Ontode anyagbeszerzoje, Csepel (for Kokay) 5. Kozponti Anyavizsgalo kivalo dolgozoja (for Veszpremi).

BALAZS, Fulop, okleveles kohomernok; KATONA, Eva, okleveles kohomernok

Material and production of sliding rings for electric machines. Koh lap 93 no.8: Suppl: Ontode 11 no.8:171-177 Ag '60.

1. Csepeli Femmu. 2. "Kohaszati Lapok" szerkeszto bizottsagi tagja (for Balazs).

KATONA, Eva

Factory news. Koh lap 95 no.12:573 D '62.

HUNGARY

SUCH, G., MADARASZ, I., DOBOZY, A., and KATONA, E., of the Institute of Physiology, Medical University, Szeged [Original version not given].

"Attempt at the Statistical Recording of Human Higher Nervous Activity"

Budapest, Acta Physiologica Academiae Scientiarum Hungaricae, Supplement TO Vol 22, 1963; pp 31-32.

Abstract [Authors' English summary, modified]: The dynamics of higher nervous activity has been investigated in university students under physiological conditions as well as pharmacological influences. Two tests were used, a motor conditioned reflex test with verbal reinforcement, and the tiktaoktoe test. The frequency of occurrence of the different latency times and stop numbers was represented in diagrams. Chlorpromazine, amphetamine, meprobamate and caffeine did not significantly change the shape of the diagrams. It was concluded that the shape of the frequency diagrams is characteristic in the individual, and that on this ground a stable and and unstable nervous activity can be distinguished depending on how well the environmental influences are compensated.

1/1

KATONA, F.; MAKAI, M.

Timiriazev's philosophy. p. 412

Vol. 114, no. 7, July 1955
TERMESZET ES TARSADALOM
Budapest

Source: Monthly list of East European Accessions, (EEAL), LC,
Vol. 5, no. 3, March 1956

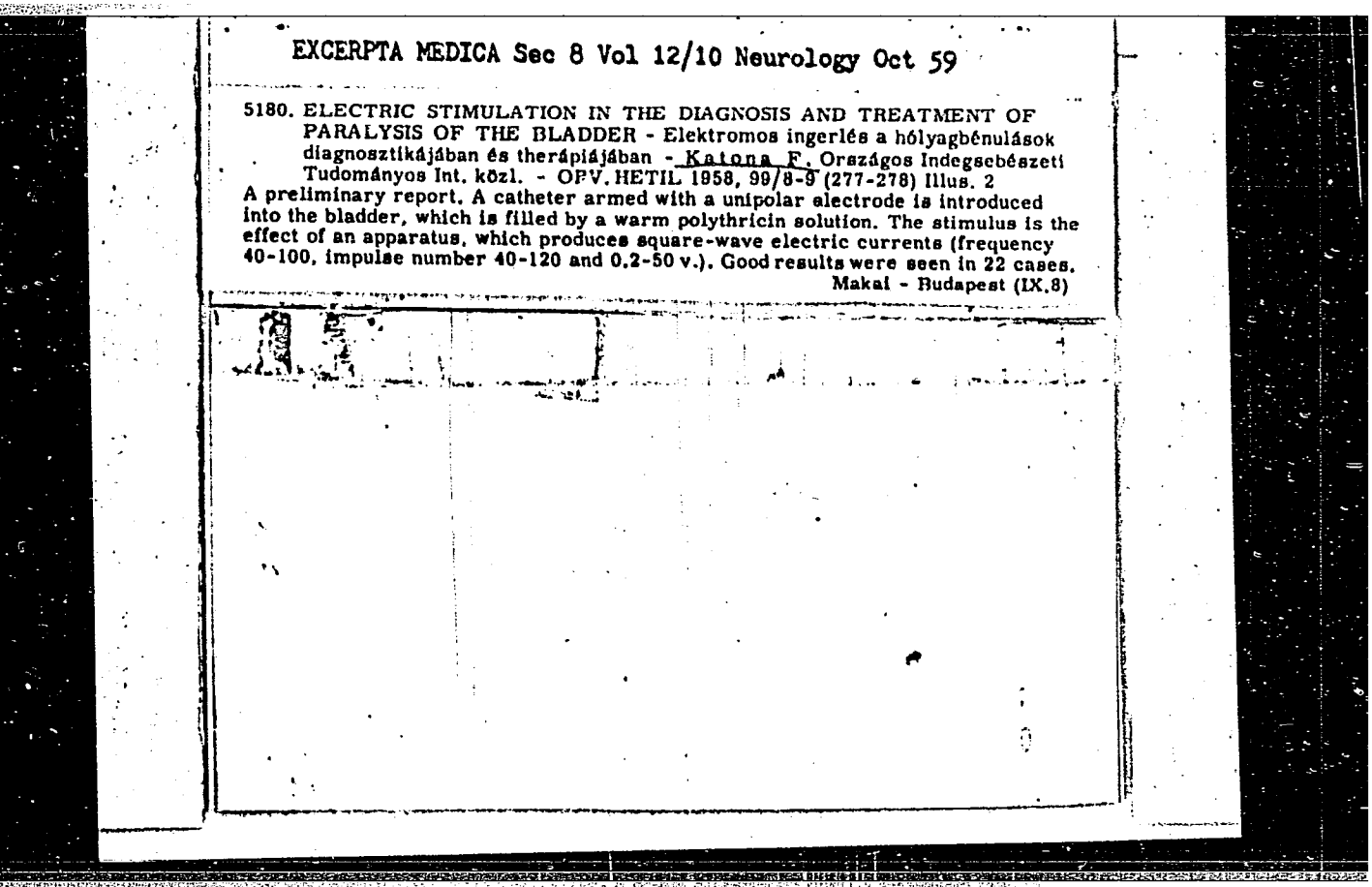
HUNGARY

KAMOLA, F., TOMKA, I., and OBAL, F., of the State Institute of Neurosurgery, Budapest [Original version not given].

"Effect of Tranquilizers on the Activity of Higher and Lower Nervous Structures"

Budapest, Acta Physiologica Academiae Scientiarum Hungaricae, Supplement to Vol 22, 1963; pp 29-30.

Abstract [Authors' English summary, modified]: General review of the effects of tranquilizers, including nature of anesthesia, activity in the EEG, the organization of stimulatory and inhibitory processes and the site of action. The reaction of lower nervous structures to tranquilizers has been studied in invertebrates; it was found that even in the most primitive nervous structures tranquilizers suspend the activity without affecting vital functions.



EXCERPTA MEDICA Sec 8 Vol 12/10 Neurology Oct 59

5180. ELECTRIC STIMULATION IN THE DIAGNOSIS AND TREATMENT OF PARALYSIS OF THE BLADDER - Elektromos ingerlés a hólyagbénulások diagnosztikájában és therápiájában - Kaiona F. Országos Indegsebészeti Tudományos Int. közl. - OPV. HETIL 1958, 99/8-9 (277-278) Illus. 2

A preliminary report. A catheter armed with a unipolar electrode is introduced into the bladder, which is filled by a warm polythricin solution. The stimulus is the effect of an apparatus, which produces square-wave electric currents (frequency 40-100, impulse number 40-120 and 0,2-50 v.). Good results were seen in 22 cases.

Makai - Budapest (IX.8)

KATONA, Ferenc, Dr.; BENYO, Imre, Dr.; LANG, Istvan, Dr.

Electrotherapy of various paralytic conditions of the gastrointestinal tract; data on the pathophysiology of the smooth musculature. Magy. sebeszet 12 no.1:53-56 Mar 59.

1. A Budapesti Orvostudomanyi Egyetem III. sz. Sebeszeti Klinikajanak (Igazgato: Rubanyi Pal dr.) es az Orszagos Idegsebeszeti Tudomanyos Intezet (Igazgato: Zoltan Laszlo dr.) kozlemenye.

(GASTROINTESTINAL DISEASES, ther.
hypotonic & spastic cond., direct intraluminal electrostimulation, pathophysiol. aspects (Hun))

(ELECTROTHERAPY, in various dis.
hypotonic & spastic cond. of gastrointestinal system, direct intraluminal electrostimulation, pathophysiol. aspects (Hun))

KATONA, Ferenc, Dr.; NAGY, Klara, P.; OBAL, Ferenc, Dr.

New types of deconnection in neurosurgical operations. Magy. sebeszet 12 no.1:88-96 Mar 59.

1. Az Orszagos Idegsebeszeti Tudomanyos Intezet Kozlemenye Igazgato: Zoltan Laszlo Dr.

(HIBERNATION, ARTIFICIAL
in brain surg. (Hun))
(BRAIN, surg.
artif. hibernation in (Hun))

KATONA, Ferenc, Dr.; BENYO, Imre, Dr.; LANG, Istvan, Dr.

Stimulation of the gastrointestinal tract by quadrangular current in animal experiments and clinical cases; preliminary report. Orv. hetil. 100 no.1:24 4 Jan 59.

1. Az Orszagos Idegsebeszeti Tudomanyos Intezet (igazgato: Zoltan Laszlo dr.) es a Budapesti Orvostudomanyi Egyetem III. sz. Sebeszeti Klinikajanak (igazgato: Rubanyi Pal dr.) kozlemenye.

(GASTROINTESTINAL DISEASES, ther.
hypotonic & spastic cond., direct stimulation of gastrointestinal tract with quadrangular current, exper. & clin. studies (Hun))

(ELECTROTHERAPY, in various dis.
hypotonic & spastic cond. of gastrointestinal system, direct stimulation with quadrangular current, exper. & clin. studies (Hun))

RATONA, Ferenc, dr.

Theory of evolution and the early theories of metabolism. Term tud kozl 5 no.7:289-292 Jl '61.

1. Tudomanyos kutato, Budapest.

KATONA, Ferenc, dr. (Budapest)

Some problems of scientific epistemology in the pre-Darwinian biology. Term tud kozl 6 no.10:444-447 O '62.

KATONA, Gy.

Intersection theorems for systems of finite sets. Acta mat Hung 15 no.3/4:329-337 '64.

1. Mathematical Institute of Lorand Eotvos University, Budapest.
Submitted August 1, 1963.

KATONA, G.

"X-ray diffraction analysis in metallurgy." p. 534. (Magyar Technika, Vol. 8, no. 9, Sept 53, Budapest)

SO: Monthly List of East European Accessions, Vol 3 No 2 Library of Congress Feb 54 Uncl